QDSP-2050

Small PC with Intel® Calpella Platform

User's Guide

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Quanmax reserves the right to make changes without notice in product or component design as warranted by evolution in user needs or progress in engineering or manufacturing technology. Changes which affect the operation of the unit will be documented in the next revision of this user's guide.

Revision	Date	Edited by	Changes
1.0	2010/08/03	Zack	Initial Release
1.1	2010/09/17	Zack	Add Chassis Dimension & VESA mount figure
1.2	2010/10/22	Zack	Update BIOS
1.3	2011/01/27	Zack	Update Product Description – Remove Fanless
1.4	2011/08/15	Zack	Update Figure 2 Rear Panel
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Safety Instructions

■ Before You Begin

Before handling the product, read the instructions and safety guidelines on the following pages to prevent damage to the product and to ensure your own personal safety. Refer to the “Advisories” section in the Preface for advisory conventions used in this user’s guide, including the distinction between Warnings, Cautions, Important Notes, and Notes.

- Always use caution when handling/operating a computer. Only qualified, experienced, authorized electronics service personnel should access the interior of a computer. The power supplies produce high voltages and energy hazards, which can cause bodily harm.
- Use extreme caution when installing or removing components. Refer to the installation instructions in this user’s guide for precautions and procedures. If you have any questions, please contact with your dealer for Post-Sales Technical Support.
- Access can only be gained by service persons or by users who have been instructed about the reasons for the restrictions applied to the location and about any precautions that shall be taken; and access is through the use of a tool or lock and key, or other means of security, and is controlled by authority responsible for the location.

WARNING

High voltages are present inside the chassis when the unit’s power cord is plugged into an electrical outlet. Turn off system power, turn off the power supply, and then disconnect the power cord from its source before removing the chassis cover. Turning off the system power switch does not remove power to components.

■ When Working Inside a Computer

Before taking covers off a computer, perform the following steps:

1. Turn off the computer and any peripherals.
2. Disconnect the computer and peripherals from their power sources or subsystems to prevent electric shock or system board damage. This does not apply when hot swapping parts.
3. Follow the guidelines provided in “Preventing Electrostatic Discharge” on the following page.
4. Disconnect any telephone or telecommunications lines from the computer.

In addition, take note of these safety guidelines when appropriate:

- To help avoid possible damage to system boards, wait five seconds after turning off the computer before removing a component, removing a system board, or disconnecting a peripheral device from the computer.
- When you disconnect a cable, pull on its connector or on its strain-relief loop, not on the cable itself. Some cables have a connector with locking tabs. If you are disconnecting this type of cable, press in on the locking tabs before disconnecting the cable. As you pull connectors apart, keep them evenly aligned to avoid bending any connector pins. Also, before connecting a cable, make sure both connectors are correctly oriented and aligned.

CAUTION

Do not attempt to service the system yourself except as explained in this user’s guide. Follow installation and troubleshooting instructions closely.

■ Preventing Electrostatic Discharge

Static electricity can harm system boards. Perform service at an ESD workstation and follow proper ESD procedure to reduce the risk of damage to components. We strongly encourage you to follow proper ESD procedure, which can include wrist straps and smocks, when servicing equipment.

You can also take the following steps to prevent damage from electrostatic discharge (ESD):

- When unpacking a static-sensitive component from its shipping carton, do not remove the component’s antistatic packing material until you are ready to install

the component in a computer. Just before unwrapping the antistatic packaging, be sure you are at an ESD workstation or grounded. This will discharge any static electricity that may have built up in your body.

- When transporting a sensitive component, first place it in an antistatic container or packaging.
- Handle all sensitive components at an ESD workstation. If possible, use antistatic floor pads and workbench pads.
- Handle components and boards with care. Don't touch the components or contacts on a board. Hold a board by its edges or by its metal mounting bracket.
- Do not handle or store system boards near strong electrostatic, electromagnetic, magnetic, or radioactive fields.

■ Instructions for Lithium Battery

WARNING

Danger of explosion when battery is replaced with incorrect type. Only replace with the same or equivalent type recommended by the manufacturer.

Do not dispose of lithium batteries in domestic waste. Dispose of the battery according to the local regulations dealing with the disposal of these special materials (e.g. to the collecting points for disposal of batteries)

■ Voltage Ratings

The external power adaptor of the QDSP-2050 has the following voltage ratings:

- Input: 100-240 VAC, 50-60 Hz
- Output: 75W, +19Vdc, 3.95A

Preface

■ How to Use This Guide

This guide is designed to be used as step-by-step instructions for installation, and as a reference for operation, troubleshooting, and upgrades.

NOTE

Driver downloads and additional information are available under Downloads on our website: www.quanmax.com

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■ Unpacking

When unpacking, follow these steps:

1. After opening the box, save it and the packing material for possible future shipment.
2. Remove all items from the box. If any items listed on the purchase order are missing, notify your customer service immediately.
3. Inspect the product for damage. If there is damage, notify your customer service immediately. Refer to “Warranty Policy” for the return procedure.

■ Regulatory Compliance Statements

This section provides the FCC compliance statement for Class A devices.

FCC Compliance Statement:

This equipment has been tested and found to comply with limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reason able protection against harmful interference in residential installations. This equipment generates, uses, and can radiate radiofrequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television equipment reception, which can be determined by

turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by your dealer could void the user's authority to operate the equipment.

NOTE

The assembler of a personal computer system may be required to test the system and/or make necessary modifications if a system is found to cause harmful interference or to be noncompliant with the appropriate standards for its intended use.

■ Warranty Policy

Limited Warranty

Please consult your distributor for warranty verification.
The limited warranty is void if the product has been subjected to alteration, neglect, misuse, or abuse; if any repairs have been attempted by anyone other than your manufacturer or its authorized agent; or if the failure is caused by accident, acts of God, or other causes beyond the control of your dealer or the manufacturer. Neglect, misuse, and abuse shall include any installation, operation, or maintenance of the product other than in accordance with the user’s guide.
No agent, dealer, distributor, service company, or other party is authorized to change, modify, or extend the terms of this Limited Warranty in any manner whatsoever. Your manufacturer reserves the right to make changes or improvements in any product without incurring any obligation to similarly alter products previously purchased.

Return Procedure

For any Limited Warranty return, please contact with your dealer.
All product(s) returned to your dealer for service or credit must be accompanied by a Return Material Authorization (RMA) Number. Freight on all returned items must be prepaid by the customer who is responsible for any loss or damage caused by

common carrier in transit. Returns for Warranty must include a Failure Report for each unit, by serial number(s), as well as a copy of the original invoice showing the date of purchase.
To reduce risk of damage, returns of product must be in a shipping container. If the original container has been lost or damaged, new shipping containers may be obtained from your dealer's Customer Service at a nominal cost.
We own all parts removed from repaired products. We use new and reconditioned parts made by various manufacturers in performing warranty repairs and building replacement products. If your dealer repairs or replaces a product, its warranty term is not extended.
Shipments not in compliance with this Limited Warranty Return Policy will not be accepted by us.

Limitation of Liability

In no event shall your dealer be liable for any defect in hardware, software, loss, or inadequacy of data of any kind, or for any direct, indirect, incidental, or consequential damages in connection with or arising out of the performance or use of any product furnished hereunder. Our liability shall in no event exceed the purchase price of the product purchased hereunder. The foregoing limitation of liability shall be equally applicable to any service provided by us or its authorized agent.

■ Maintaining Your Computer

Environmental Factors

- **Temperature**

  The ambient temperature within an enclosure may be greater than room ambient temperature. Installation in an enclosure should be such that the amount of air flow required for safe operation is not compromised. Consideration should be given to the maximum rated ambient temperature. Overheating can cause a variety of problems, including premature aging and failure of chips or mechanical failure of devices.

  If the system has been exposed to abnormally cold temperatures, allow a two-hour warm-up period to bring it up to normal operating temperature before turning it on. Failure to do so may cause damage to internal components, particularly the hard disk drive.

- **Humidity**

  High-humidity can cause moisture to enter and accumulate in the system. This moisture can cause corrosion of internal components and degrade such properties as electrical resistance and thermal conductivity. Extreme moisture buildup inside the system can result in electrical shorts, which can cause serious damage to the system.

  Buildings in which climate is controlled usually maintain an acceptable level of humidity for system equipment. However, if a system is located in an unusually humid location, a dehumidifier can be used to maintain the humidity within an acceptable range. Refer to the “Specifications” section of this user’s guide for the operating and storage humidity specifications.

- **Altitude**

  Operating a system at a high altitude (low pressure) reduces the efficiency of the cooling fans to cool the system. This can cause electrical problems related to arcing and corona effects. This condition can also cause sealed components with internal pressure, such as electrolytic capacitors, to fail or perform at reduced efficiency.

Power Protection

The greatest threats to a system’s supply of power are power loss, power spikes, and power surges caused by electrical storms, which interrupt system operation and/or damage system components. To protect your system, always properly ground power cables and one of the following devices.

- **Surge Protector**

  Surge protectors are available in a variety of types and usually provide a level of protection proportional with the cost of the device. Surge protectors prevent voltage spikes from entering a system through the AC power cord. Surge protectors, however, do not offer protection against brownouts, which occur when the voltage drops more than 20 percent below the normal AC line voltage level.

- **Line Conditioner**

  Line conditioners go beyond the overvoltage protection of surge protectors. Line conditioners keep a system’s AC power source voltage at a fairly constant level and, therefore, can handle brownouts. Because of this added protection, line conditioners cost more than surge protectors. However, line conditioners

cannot protect against a complete loss of power.

- **Uninterruptible Power Supply**
  Uninterruptible power supply (UPS) systems offer the most complete protection against variations on power because they use battery power to keep the server running when AC power is lost. The battery is charged by the AC power while it is available, so when AC power is lost, the battery can provide power to the system for a limited amount of time, depending on the UPS system.
  UPS systems range in price from a few hundred dollars to several thousand dollars, with the more expensive unit s allowing you to run larger systems for a longer period of time when AC power is lost. UPS systems that provide only 5 minutes of battery power let you conduct an orderly shutdown of the system, but are not intended to provide continued operation. Surge protectors should be used with all UPS systems, and the UPS system should be Underwriters Laboratories (UL) safety approved.

Chapter 1

Introduction

■ Overview

QDSP-2050 is a surprisingly affordable, space-saving Nettop that will capably serve everyday computing needs and turn your living room into home theater with ease. Featuring the latest 32 nm Intel® Capella platform with intel® HM55 chipset, it provides the powerful computing and graphic performance with the optimal energy efficiency.

Checklist

- QDSP-2050
- Power Adapter
- Power Cord
- Driver CD
- Quick installation Guide
- VESA Mounting Kit

Features

- Intel® Calpella platform with HM55 chipset
- 2x DDR3 800/1066 SO-DIMM, up to 8GB
- 1x DVI-I, 1x HDMI, 1x GbE and 5.1 channel audio output
- SATA HDD or SSD, 1x eSATA & USB Combo Connector
- 3-in-1 card reader and 5x USB
- Optional Wireless Ethernet or 3G Module

■ Product Specifications

Dimensions	203 x 153.1 x 36.3 mm (WxHxD)
Weight	1.1 Kg (Net)/2.5 Kg (Gross)
CPU/ Chipset	Support Arrandele rPGA socket type processor with HM55 express chipset
RAM	2x DDR3 800/1066 SO-DIMM up to 8GB
Storage	1 x 2.5” SATA HDD or SSD
Front IO	3x 3.5mm Phone Jack, support 5.1 channel audio output 1x eSATA and USB 2.0 combo connector 3x USB 2.0 1x Power LED 1x Storage status LED (HDD/Card reader) 1x Wifi status LED 1x Clear CMOS Button 1x Power Button 1x 3 in 1 Card Reader (SD / MMC / MS)
Rear IO	1x DC JACK for power input 1x DVI-I for DVI-D or VGA output 1x HDMI (V1.3 compatible) 1x RJ-45 GbE port 2x USB 2.0 1x COM Port support RS-232/422/485 (Offer +5V/+12V output selection) 1X Wifi external antenna 1x 3G external antenna 1x S/PDIF Output
Expansion Slot	2 x half size mini PCIe slot (Optional for 3G/WiFi module) 1x SIM card slot (for 3G appliance) support user accessible
Cooling	Smart Fan Control
Power Unit	Input: 100-240 VAC Output: 75W, +19VDC, 3.95A
Temperature / Humidity	Operating: 0°C to 40°C, 0%-90%, non-condensing Storage: -20°C to 80°C, 0%-90%, non-condensing
Mounting	VESA-mount
Certifications	CE, FCC Class A

Table 1 QDSP-2050 product specifications

■ System tour

Refer to the figures below to identify the components of the system.

■ Front Panel

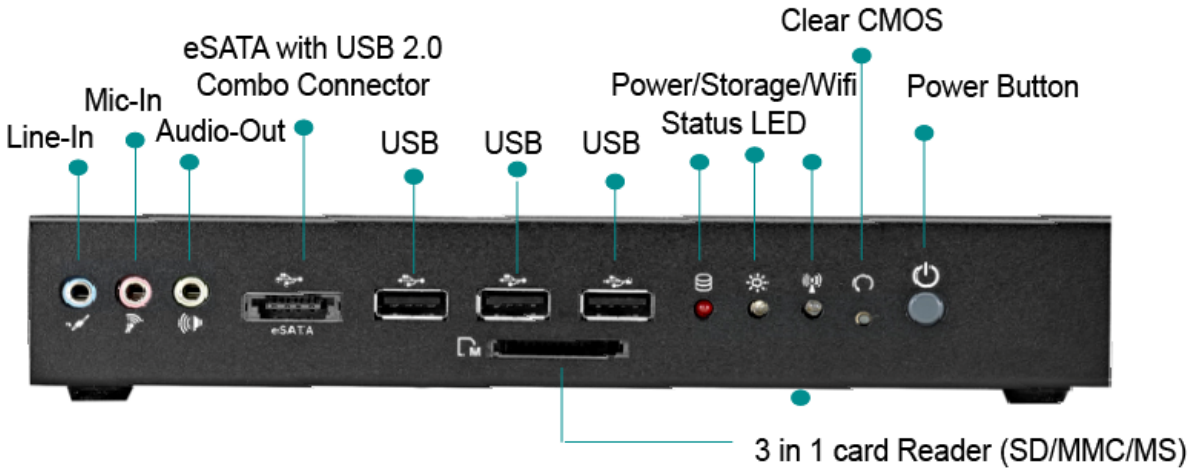


Figure 1 Front Panel

Power Switch

The power push button allows powering ON and OFF the system.

Clear CMOS Button

To clear the CMOS, use the tip of a pen to press the button briefly (for less than three seconds).

Power LED (Green)

The power LED will light when the PC is power-on.

HDD LED (Red)

The hard disk LED blinks when data is being written into or read from the HDD.

WiFi LED (Blue)

When the data is Transferring, the WiFi LED will blink.

USB

The USB (Universal Serial Bus) port is compatible with USB devices such as keyboards, mouse devices, cameras, and hard disk drives. USB allows many devices to run simultaneously on a single computer, with some peripheral acting as additional plug-in sites or hubs.

Card Reader

3-in-1 SD/MCC/MS Card Reader

Combo Connector

1x eSATA and USB combo connector (Power eSATA)

Phone Jack

Audio Out

The stereo headphone jack is used to connect the system's audio out signal to amplified speakers or headphones.

MIC-IN

The microphone jack is designed to connect the microphone used for video conferencing, voice narrations, or simple audio recordings.

Line-IN

The Line-in jack is designed to take input from a higher-powered sound source.

CAUTION

This connector do not support hot-swapping. Users should not connect or disconnect their eSATA/USB devices from PC when the system is working.

Rear Panel

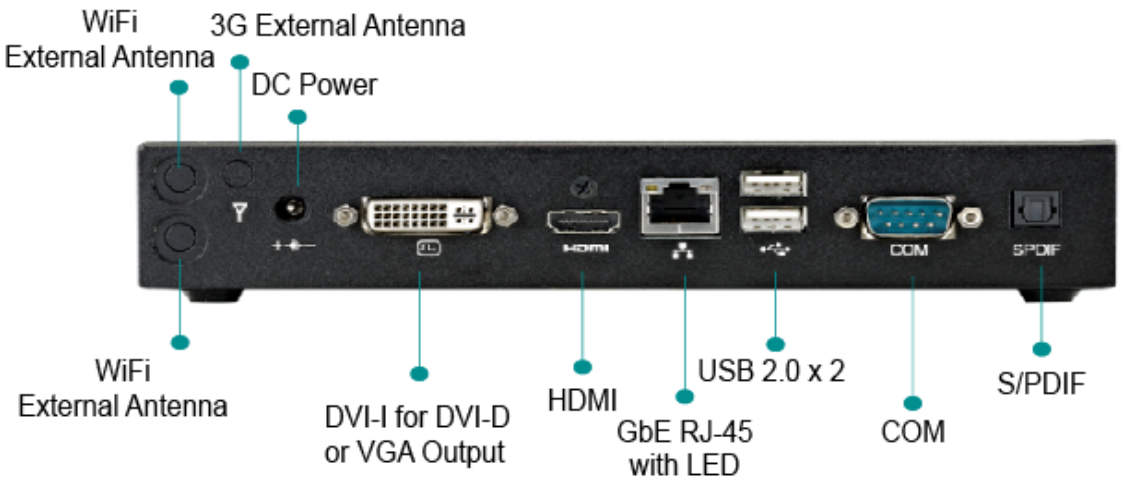


Figure 2 Rear Panel

S/PDIF

S/PDIF output for carrying digital audio signals out to the device.

COM

D-Sub 9 pin connector for RS-232 connection

USB

The USB (Universal Serial Bus) port is compatible with USB devices such as keyboards, mouse devices, cameras, and hard disk drives. USB allows many devices to run simultaneously on a single computer, with some peripheral acting as additional plug-in sites or hubs.

Ethernet

The eight-pin RJ-45 LAN port supports a standard Ethernet cable for connection to a local network.

HDMI

HDMI connector for display output

DVI-I

DVI-I connector for DVI-D or VGA output

DC Jack

The supplied power adapter converts AC power to DC for use with this jack. Power supplied through this jack supplies power to the PC. To prevent damage to the PC, always use the supplied power adapter.

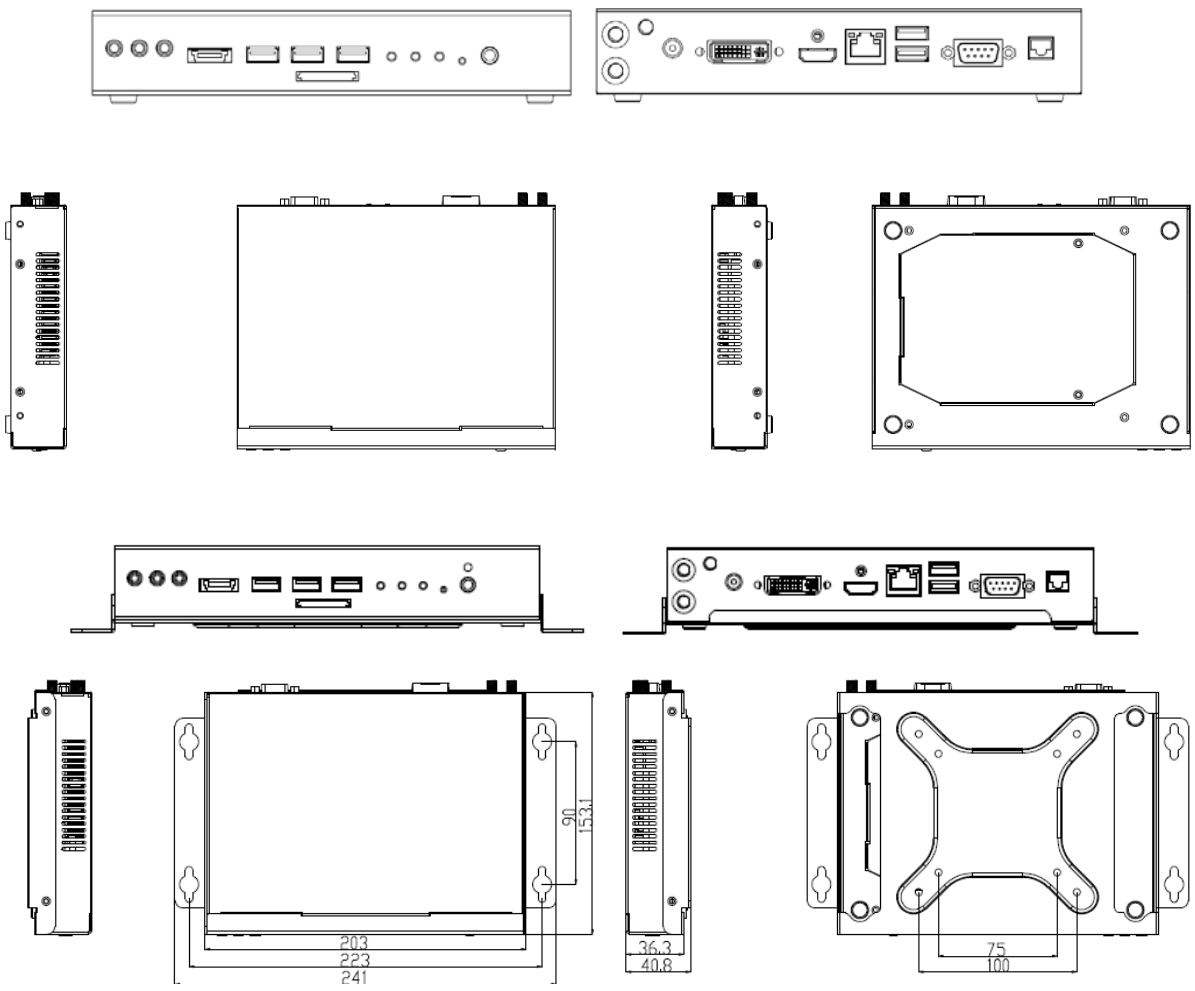
WiFi External Antenna

Spared hole on the casing for connecting WiFi external antenna

3G External Antenna

Spared hole on the casing for connecting 3G external antenna

Mechanical Figures



Dimension: 203 x 153.1 x 36.3 mm (W x H x D)

Figure 3 Mechanical Figures

Chapter 2

Getting Started

■ Setting up your PC

■ Connect the monitor, mouse and keyboard

Connecting the monitor

Connect the DVI cable from your display to the DVI port.

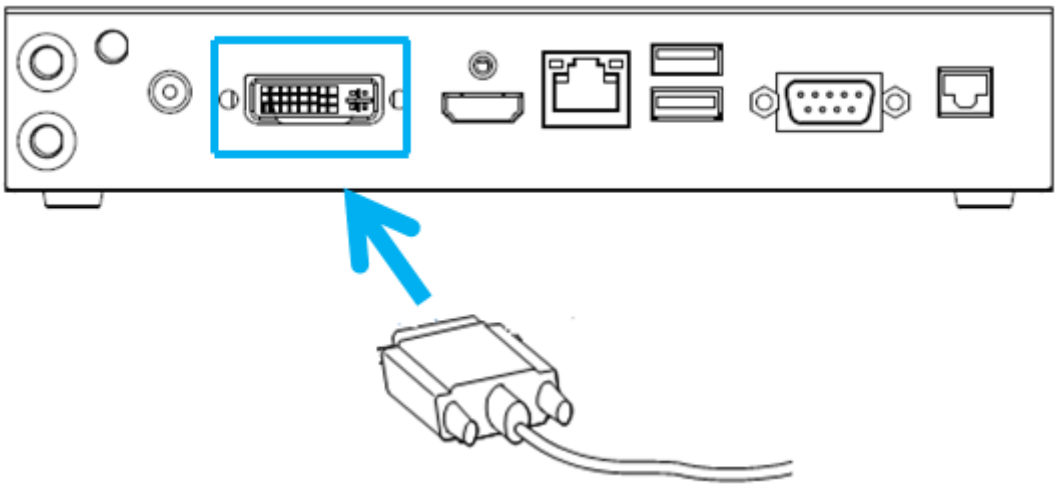


Figure 4 Connect the DVI cable

NOTE

When the system reboots without connecting the DVI, there might be no image on screen when you insert the DVI cable. Please pressing <**Ctrl**>+<**Alt**>+<**F4**> simultaneously to show the image on screen.

Connecting USB mouse & keyboard

Your QDSP-2050 does not come with a keyboard and mouse, but you can use any USB keyboard or mouse with your computer.

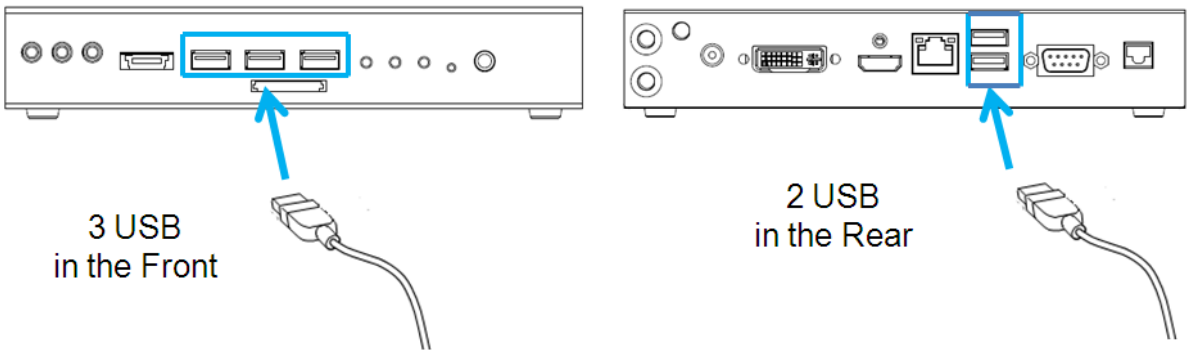


Figure 5 Connecting USB mouse & keyboard

NOTE

Using a third-party USB mouse or keyboard may require software drivers. Check the manufacturer's website for the latest software drivers.

■ Connecting to a network device

Connect one end of a network cable to the LAN port on the system rear panel and the other end to a hub or switch.

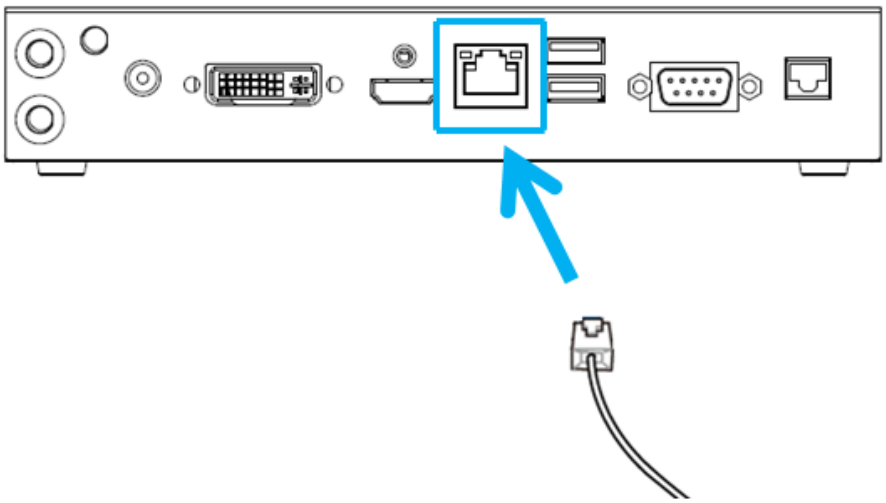


Figure 6 Network cable with RJ45 connector

■ Turning on the system

1. Connect the power adapter cable to the DC jack (DC IN) of the QDSP-2050
2. Connect the power cable to the power adapter
3. Connect the power cable to a power outlet
4. Press the power switch on the front panel to turn on the system

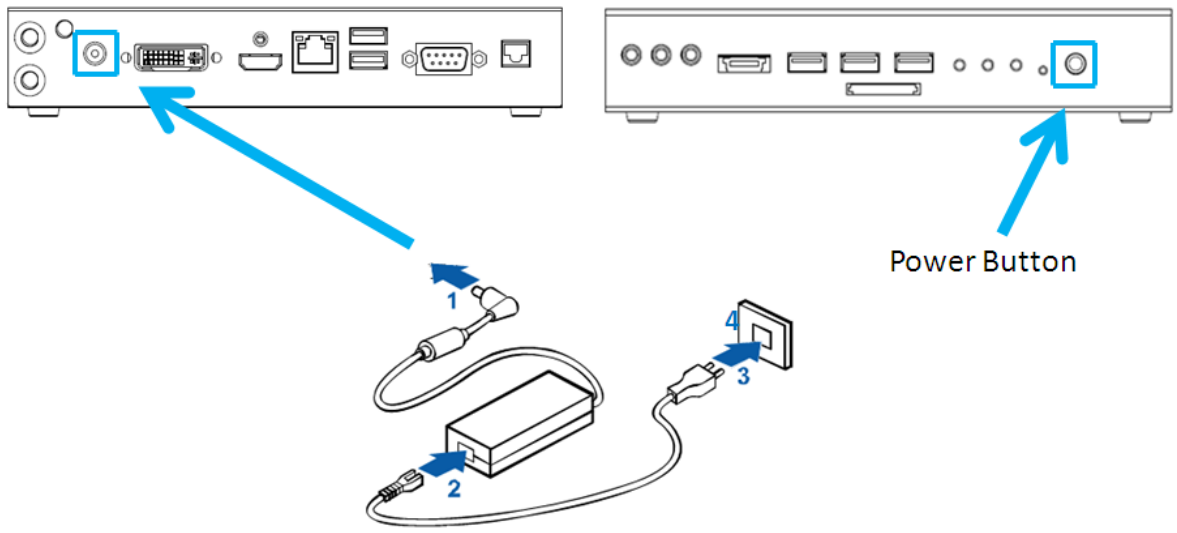


Figure 7 Turing on the system

■ Connecting VESA Mount on QDSP-2050

1. Take out the VESA mounting kit form your package and facing it onto the bottom of QDSP-2050; then tightening the screws on your QDSP-2050 as figures shown below.

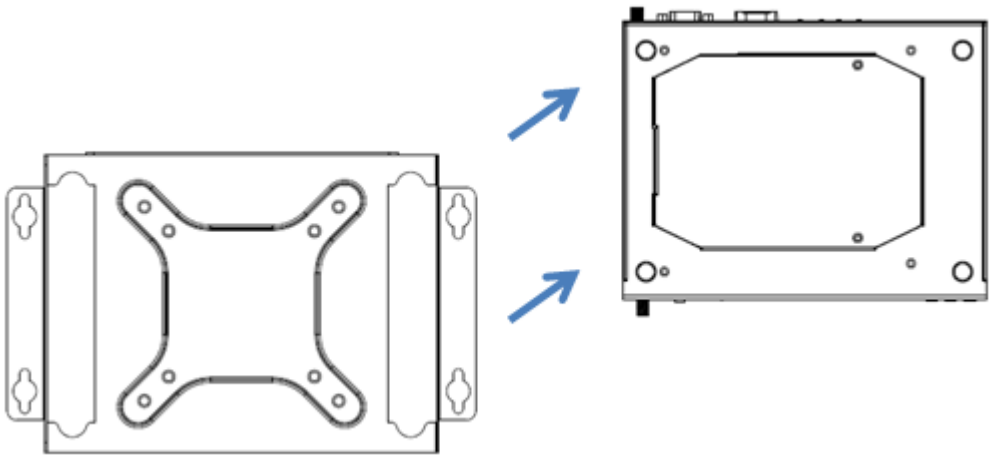


Figure 8 VESA Mount Assembly

2. Following figures are the complete status when you done.

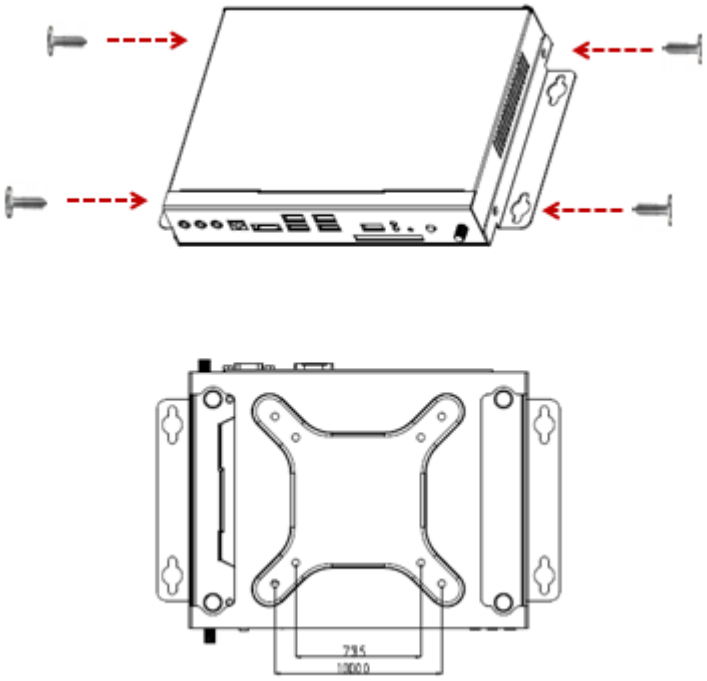


Figure 9 VESA Mount on QDSP-2050

■ Mounting your PC to a monitor

1. Firstly, mount your VESA kit on the backside of the monitor with four screws in the package.
2. Secondly, place the QDSP-2050 on the VESA mounting kit and then tightening the screws from the holes on both sides of the VESA bracket - make sure the computer is fitting well on the bracket.

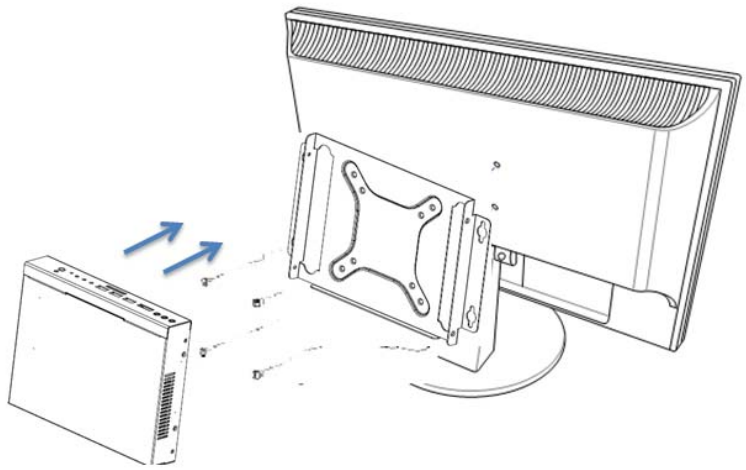


Figure 10 VESA mounting (Optional)

NOTE

To fasten the metal shelf, your monitor must comply with VESA75 or VESA100 standard.

Remarks: VESA mounting kit could be used as wall mounting kit as well.

■ Changing Memory and mini-PCIe

Firstly, Opening the cover by loosening the two screws on the bottom of QDSP-2050 as shown below;

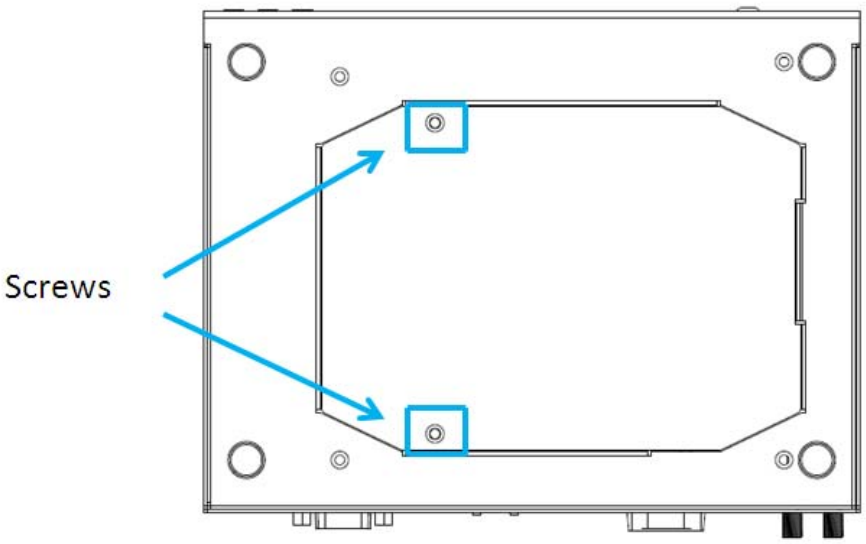


Figure 11 Opening the Cover on the Bottom

Then you may able to change the DDR SO-DIMM and/or mini-PCIe modules.

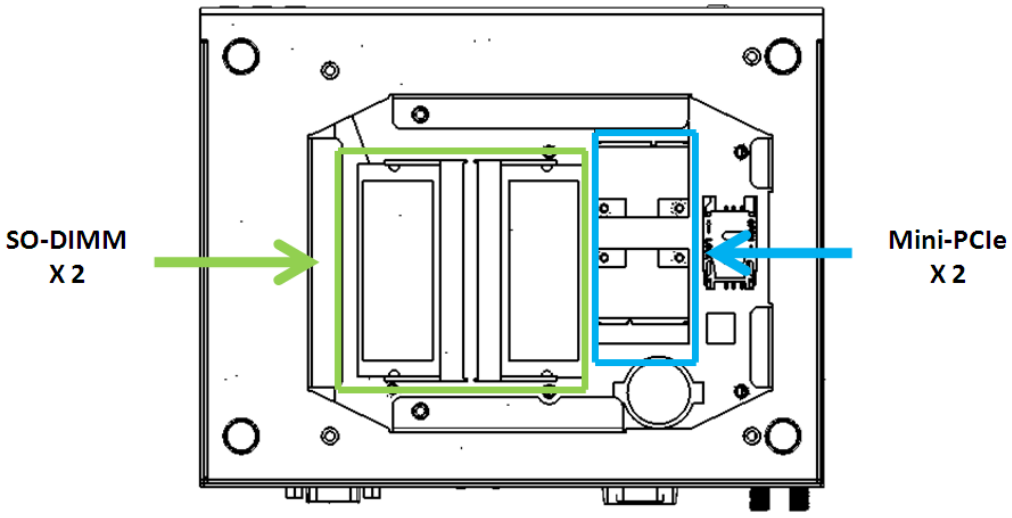


Figure 12 Bottom view of Main Board

Changing Memory

Carefully follow the steps below in order to install the SO-DIMMs:

1. To avoid generating static electricity and damaging the SO-DIMM, ground yourself by touching a grounded metal surface or use a ground strap before you touch the SO-DIMM.
2. Do not touch the connectors of the SO-DIMM. Dirt or other residue may cause a malfunction.
3. Hold the SO-DIMM with its notch aligned with the memory socket of the board and insert it at a 30-degree angle into the socket.

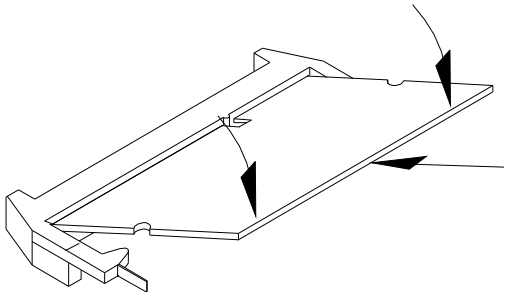


Figure 13 SO-DIMM Installation (1)

Align the SO-DIMM Memory Module with the onboard socket

4. Fully insert the module into the socket until a “click” is heard.
5. Press down on the SO-DIMM so that the tabs of the socket lock on both sides of the module

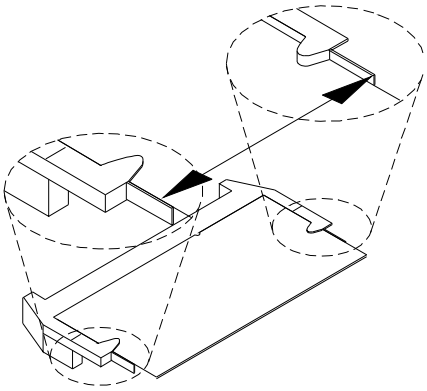


Figure 14 SO-DIMM Installation (2)

Press down on the SO-DIMM Memory Module to lock it in place

Removing a SO-DIMM:

To remove the SO-DIMM, use your fingers or a small screwdriver to carefully push away the tabs that secure either side of the SO-DIMM. Lift it out of the socket.
Make sure you store the SO-DIMM in an anti-static bag. The socket must be populated with memory modules of the same size and manufacturer.

Changing mini-PCIe

(1) Place your mini-PCIe module toward the mini-PCIe socket.

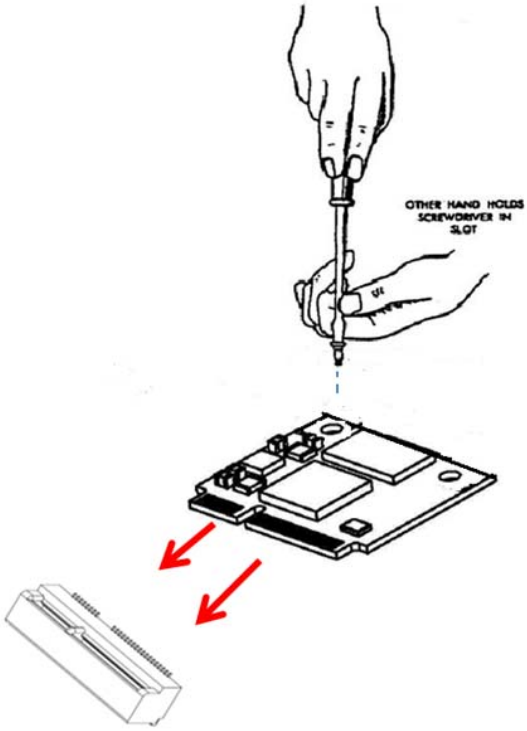


Figure 15 mini-PCIe Installation

(2) Tightening the screw on the hole of the mini-PCIe module as shown above.

Chapter 3

AMI BIOS Setup

■ Overview

This chapter provides a description of the AMI BIOS. The BIOS setup menus and available selections may vary from those of your product. For specific information on the BIOS for your product, please contact with your dealer.

NOTE: The BIOS menus and selections for your product may vary from those in this chapter. For the BIOS manual specific to your product, please contact with us.

AMI's ROM BIOS provides a built-in Setup program, which allows the user to modify the basic system configuration and hardware parameters. The modified data will be stored in a battery-backed CMOS, so that data will be retained even when the power is turned off. In general, the information saved in the CMOS RAM will not need to be changed unless there is a configuration change in the system, such as a hard drive replacement or when a device is added.
It is possible for the CMOS battery to fail, which will cause data loss in the CMOS only. If this happens you will need to reconfigure your BIOS settings.

■ Main Menu

The BIOS Setup is accessed by pressing the DEL key after the Power-On Self-Test (POST) memory test begins and before the operating system boot begins. Once you enter the BIOS Setup Utility, the Main Menu will appear on the screen. The Main Menu provides System Overview information and allows you to set the System Time and Date. Use the “<” and “>” cursor keys to navigate between menu screens.

Table 2 BIOS Main Menu

BIOS SETUP UTILITY				
Main	Advanced	Boot	Security	Save & Exit
BIOS Information				Set the date. Use Tab to switch between data elements.
Project version		0.05		
Build date		10/22/2010		
CPU Information				
Intel ® Core ™ i7 CPU M 620 @ 2.67GHz				
Microcode Revision		9		
Processor Cores		2		
Memory Information				
Total Memory		1024 MB (DDR3 1066)		← Select Screen
				↑↓ Select Item
System Date		[Mon 08/2/2010]		Enter: Select
System Time		[16:00:08]		+- Change Opt.
				F1 General Help
Access level		Administrator		F2 Previous values
				F3 Optimized Defaults
				F4 Save ESC Exit
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Below table is described for Primary IDE Master, Primary IDE Slave, Secondary IDE Master setting.

■ Advanced

Table 3 Advanced

BIOS SETUP UTILITY				
Main	**Advanced**	Boot	Security	Save & Exit
Onboard LAN Controller		[Enabled]		
Launch PXE OpROM		[Disabled]		
Audio Controller		[Enabled]		
>Display Configuration				
>Power management Configuration				
>SATA Configuration				
>USB Configuration				← Select Screen
>H/M Monitor				↑↓ Select Item
>Super IO Configuration				Enter: Select
				+- Change Opt.
				F1 General Help
				F2 Previous values
				F3 Optimized Defaults
				F4 Save ESC Exit
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Full Item For Debug

Options: Enabled, Disabled

Onboard LAN Controller

Options: Enabled, Disabled

Launch PXE OpROM

Options: Enabled, Disabled

Audio Controller

Options: Enabled, Disabled

Table 4 Advanced - Display Configuration

BIOS SETUP UTILITY					
Main	**Advanced**	Boot	Security	Save & Exit	
IGD Memory			[32M]	IGD Share memory Size	
DVMT/FIXED Memory			[256MB]		
				← Select Screen ↑↓ Select Item Enter: Select +- Change Opt. F1 General Help F2 Previous values F3 Optimized Defaults F4 Save ESC Exit	
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IGD memory

Options: Disabled, 32M, 64M, 128M

DVMT/FIXED Memory

Options: 128MB, 256MB, Maximum

Table 5 Advanced - Power Management Configuration

BIOS SETUP UTILITY					
Main	**Advanced**	Boot	Security	Save & Exit	
ACPI Sleep State			[S3 (Suspenf to R…]	Select the highest ACPI sleep state the system will enter, when the SUSPEND button is pressed.	
Restore AC Power Loss			[power Off]		
Wake system with Fixed Time			[Disabled]		
Wake System with Dynamic Time			[Disabled]		
				← Select Screen ↑↓ Select Item Enter: Select +- Change Opt. F1 General Help F2 Previous values F3 Optimized Defaults F4 Save ESC Exit	
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ACPI Sleep State

Options: Suspend Disabled, S1 (CPU Stop Clock), S3 (Suspend to RAM)

Restore AC Power Loss

Options: Power Off, Power On, Last State

Wake System with Fixed Time

Options: Enabled, Disabled

Wake System with Dynamic Time

Options: Enabled, Disabled

Table 6 Advanced - SATA Configuration

BIOS SETUP UTILITY				
Main	**Advanced**	Boot	Security	Save & Exit
SATA Configuration				
SATA Port1		WDC WD800BEVS – (80.0GB)		← Select Screen
SATA Port2		Not Present		↑↓ Select Item
SATA Mode		[IDE Mode]		Enter: Select
				+- Change Opt.
				F1 General Help
				F2 Previous values
				F3 Optimized Defaults
				F4 Save ESC Exit
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SATA Mode

Options: Disabled, IDE Mode, AHCI Mode

Table 7 Advanced - USB Configuration

BIOS SETUP UTILITY				
Main	**Advanced**	Boot	Security	Save & Exit
USB Configuration USB Devices: 1 Drive, 1 keyboard, 1 Mouse, 3 Hubs Legacy USB Support [Enabled]				Enables Legacy USB support. Auto option disables legacy support if no USB devices are connected. DISABLE option will keep USB devices available only for EFI applications. ← Select Screen ↑↓ Select Item Enter: Select +- Change Opt. F1 General Help F2 Previous values F3 Optimized Defaults F4 Save ESC Exit
V02.00.1201. Copyright © 2009, American Megatrends, Inc.				

Legacy USB Support

Options: Enabled, Disabled, Auto

Table 8 Advanced – H/W Configuration

BIOS SETUP UTILITY				
Main	**Advanced**	Boot	Security	Save & Exit
PC Health Status CPU Shutdown Temperature [Disabled] CPU temperature : +54.1 C System temperature : +45.0 C CPU Fan Speed : 4273 RPM Input : +1.44 V 5V : +5.056 V VCRE : +1.03 V VCC : +3.392 V				← Select Screen ↑↓ Select Item Enter: Select +- Change Opt. F1 General Help F2 Previous values F3 Optimized Defaults F4 Save ESC Exit
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CPU Shutdown Temperature

Options: Disabled, 80C, 85C, 90C, 95C

Table 9 Advanced – Super IO Configuration

BIOS SETUP UTILITY				
Main	**Advanced**	Boot	Security	Save & Exit
Super IO Configuration >Serial Port 1 Configuration >Serial Port 2 Configuration				Set Parameters of Serial Port 1 (COMA) ← Select Screen ↑↓ Select Item Enter: Select +- Change Opt. F1 General Help F2 Previous values F3 Optimized Defaults F4 Save ESC Exit
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Table 10 Advanced – Super IO Configuration –Serial Port 1

BIOS SETUP UTILITY				
Main	**Advanced**	Boot	Security	Save & Exit
Serial Port 1 Configuration Serial Port Device Settings Change Settings Serial port 1 Type Serial Port 1 Power			[Enabled] IO=3F8h; IRQ=4; [Auto] [RS232] {Normal}	Enable or Disable Serial Port (COM) ← Select Screen ↑↓ Select Item Enter: Select +- Change Opt. F1 General Help F2 Previous values F3 Optimized Defaults F4 Save ESC Exit
V02.00.1201. Copyright © 2009, American Megatrends, Inc.				

Serial Port

Options: Disabled, Enabled

Change Settings

Options: Auto, IO=3F8h; IRQ=4; IO=3F8h; IRQ=3, 4, 5, 6, 7, 10, 11, 12; IO=2F8h; IRQ=3, 4, 5, 6, 7, 10, 11, 12; IO=3E8h; IRQ=3, 4, 5, 6, 7, 10, 11, 12; IO=2E8h; IRQ=3, 4, 5, 6, 7, 10, 11, 12;

Serial Port 1 Type

Options: Rs232, RS422, RS485

Serial Port 1 Power

Options: Normal, 5V, 12V

Table 11 Advanced – Super IO Configuration –Serial Port 2

BIOS SETUP UTILITY					
Main	**Advanced**	Boot	Security	Save & Exit	
Serial Port 2 Configuration				Enable or Disable Serial Port (COM)	
Serial Port	[Enabled]				
Device Settings	IO=2F8h; IRQ=3;				
Change Settings	[Auto]				
Serial port 1 Type	[RS232]				
Serial Port 1 Power	{Normal}				
				← Select Screen ↑↓ Select Item Enter: Select +- Change Opt. F1 General Help F2 Previous values F3 Optimized Defaults F4 Save ESC Exit	
V02.00.1201. Copyright © 2009, American Megatrends, Inc.					

Serial Port

Options: Disabled, Enabled

Change Settings

Options: Auto, IO=2F8h; IRQ=3; IO=3F8h; IRQ=3, 4, 5, 6, 7, 10, 11, 12; IO=2F8h; IRQ=3, 4, 5, 6, 7, 10, 11, 12; IO=3E8h; IRQ=3, 4, 5, 6, 7, 10, 11, 12; IO=2E8h; IRQ=3, 4, 5, 6, 7, 10, 11, 12;

Serial Port 2 Type

Options: Rs232, RS422, RS485

Serial Port 2 Power

Options: Normal, 5V, 12V

■ Boot

Table 12 Boot

BIOS SETUP UTILITY			
Main	Advanced	**Boot**	Security	Save & Exit
Boot Configuration			Enable or Disables Quiet Boot Option
Quiet Boot	[Disabled]		
Fast Boot	[Enabled]		
Setup prompt Timeout	1		
Bootup Numlock State	[On]		
Boot Option Priorities			
Boot Option #1	[SATA" WDC WD800B…]		← Select Screen ↑↓ Select Item Enter: Select +- Change Opt. F1 General Help F2 Previous values F3 Optimized Defaults F4 Save ESC Exit
Hard Drive BBS Priorities			
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Quiet Boot

Options: Disabled, Enabled

Fast Boot

Options: Disabled, Enabled

Setup Prompt Timeout

Enter the time you want. Example: 1 stands for 1 second.

Bootup Numlock State

Options: On, Off

Boot Option #1

Options: WDC WD800BEVS-22RST0, Disabled

Hard Drive BBS Priorities – Boot Option #1

Options: WDC WD800BEVS-22RST0, Disabled

■ Security

Table 13 Security

BIOS SETUP UTILITY	
Main Advanced Boot **Security** Save & Exit	
Password Description If only the administrator's password is set, then this only limits access to setup and is only asked for when entering setup If only the user's password is set, then this is a power on password and must be entered to boot or enter setup. In setup the user will have administrator rights. Administrator password User Password	Set Setup Administrator Password ← Select Screen ↑↓ Select Item Enter: Select +- Change Opt. F1 General Help F2 Previous values F3 Optimized Defaults F4 Save ESC Exit
V02.00.1201. Copyright © 2009, American Megatrends, Inc.	

■ Save & Exit Menu

■ Table 14 Save & Exit Menu

BIOS SETUP UTILITY	
Main Advanced Boot Security **Save & Exit**	
Save Changes and Exit Discard Changes and Exit Save Changes and Reset Discard Changes and reset Save Options Save Changes Discard Changes Restore Defaults Save as User Defaults Restore User Defaults Boot Override SATA: WDC WD800BEVS-22RSTO	Exit system setup after saving the changes ← Select Screen ↑↓ Select Item Enter: Select +- Change Opt. F1 General Help F2 Previous values F3 Optimized Defaults F4 Save ESC Exit
V02.00.1201. Copyright © 2009, American Megatrends, Inc.	

Save Changes and Exit

Exit system setup after saving the changes. Once you are finished making your selections, choose this option from the Exit menu to ensure the values you selected are saved to the CMOS RAM. The CMOS RAM is sustained by an onboard backup battery and stays on even when the PC is turned off. When you select this option, a confirmation window appears. Select [Yes] to save changes and exit.

Discard Changes and Exit

Exit system setup without saving any changes. Select this option only if you do not want to save the changes that you made to the Setup program. If you made changes to fields other than system date, system time, and password, the BIOS asks for a confirmation before exiting.

Discard Changes

Discards changes done so far to any of the setup values. This option allows you to discard the selections you made and restore the previously saved values. After selecting this option, a confirmation appears. Select [Yes] to discard any changes and load the previously saved values.

Load Optimal Defaults

Load Optimal Default values for all the setup values. This option allows you to load optimal default values for each of the parameters on the Setup menus, which will provide the best performance settings for your system. The F9 key can be used for this operation.

Chapter 4

Driver Installation

If your QDSP-2050 does not come with an operating system pre-installed, you will need to install an operating system and the necessary drivers to operate it. After you have finished assembling your system and connected the appropriate power source, power it up using the power supply and install the desired operating system.
For other operating systems, please contact with your nearest Quanmax Sales.